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Gon Kim

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EXAMINER

RIGGLEMAN, JASON PAUL

ART UNIT

PAPER NUMBER

1792

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/720,382	Applicant(s) KIM ET AL.	
	Examiner JASON P. RIGGLEMAN	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Applicant's reply filed on 12/27/2007 is acknowledged. Current pending claims are 1-3 and 8. Claims 1-3 and 8 have been amended. Claims 4-7 and 9 have been cancelled.

Response to Arguments

2. Applicant's arguments and amendments, filed 12/27/2007, have been fully considered and not persuasive. The applicant argues that the previous 112, first paragraph, rejection wherein the phrase "independent of any manual setting entered by a user" was not supported by the original disclosure – is improper because it is enabled by paragraphs [0029] and [0031] of the specification. Examiner asserts -- this argument is not understood because paragraph [0031] is drawn to a different embodiment which is not claimed. The alternative embodiment appears to state that the "automatic" washing condition may be modified by previously detected parameters in the "automatic" washing condition. Also, paragraph [0029] does not state or support that the automatic washing mode is based on parameters "independent of any manual setting entered by the user". Note: In paragraph [0031], "determining a new washing condition by referring to a look-up table" is not specific to the user or machine controller. The rejection; therefore, is maintained.

3. Applicant argues that Cho (US Patent No. 6044510) teaches only a manual washing mode since the user inputs the time and temperature into a control panel 10 (S201)– whereas claim 1 states "the time and temperature of a wash are parameters

pre-programmed into a memory of the washing machine independent of any manual setting entered by a user". Examiner states that Cho manually inputs information which then is used to perform an automatic washing -- automatic subroutine execution (Columns 3-4, Lines 59-67 and Lines 0-8). The arguments are not commensurate in scope with the claims since the claims do not identify how they differ from a subroutine.

4. In view of the amendments to the claims, the previous 112, second paragraph, rejection of the claims is withdrawn.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The phrase "independent of any manual setting entered by a user" is not supported by the original disclosure. Examiner points to claim 1, part (a) which states "detecting selection of an automatic washing mode by a user."

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by Cho (US Patent No. 6044510) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cho (US Patent No. 6044510).

8. Cho teaches a method for controlling a drum-type washing machine equipped with a manually selected automatic washing mode (Columns 5-6, Lines 24-29 and Lines 0-2). The washing mode (time and temperature subroutine) is selected by the user, S101, Fig. 2, the water temperature supplied to the washing machine is sensed, S104, and compared to a reference temperature (set temperature) during the washing mode (subroutine). Laundry is washed based on a first-predetermined washing condition (S214) if the sensed temperature is above the reference temperature (set temperature). The laundry is washed based on a second predetermined washing condition (S202-S213) if the sensed temperature is below the reference temperature (set temperature) (Columns 3-4, Lines 59-67 and Lines 0-8). The first and second predetermined washing conditions are stored in a memory of the control unit (microprocessor subroutines)(Column 3, Lines 35-67). The washing conditions (subroutines) may comprise data about an **optimal amount of washing water (water level)**, a duration of time of respective temperatures measured in a measuring step, a rotational velocity of the drum and a period for change the rotational direction of the drum (Column 2, Lines 59-64). The washing mode (subroutine) is also based on a predetermined washing time, S215, Fig. 3. Water is supplied to a tub of the washing machine from a water supply valve. In the automatic washing mode, laundry is washed based on parameters

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pre-programmed (subroutines pre-input into the microprocessor) into the control unit of the washing machine (Column 3, Lines 25-33).

9. In the alternative, Cho does not teach an automatic washing mode; however, it has been held that it is obvious to make a manual device automatic (*In re Venner* 120 USPQ 192). It would have been obvious to one of ordinary skill to modify Cho to create an efficient automatic washing machine which reduces the time needed by the user to operate and control the washing machine.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2-3 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Cho (US Patent No. 6044510), as applied to claim 1 above, in view of Harwood (US Patent No. 5768728).

12. In regards to claim 2, Cho does not teach a step of sensing a load size; however, Harwood discloses such a method. Harwood teaches a process (Column 2, Lines 47-67 and Column 3, Lines 0-2) whereby a laundry washing machine automatically determines a load size and fills the tub to the water level, accordingly. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cho with Harwood to create an energy efficient automatic drum-type washing machine – which uses both water temperature and load size to determine the washing condition.

13. In regards to claim 3, Cho (as modified by Harwood above) does not teach the washing conditions stored in a look-up table; however, it has been held that an obvious choice in design is not patentable (*In re Kuhle* 188 USPQ 7). The combination of Cho, as modified by Harwood, teaches a washing machine controller which stores subroutines. It would have been obvious to one of ordinary skill to modify Cho, as modified by Harwood, to create a look-up table based format for the controller to store the subroutines in the controller memory.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON P. RIGGLEMAN whose telephone number is (571)272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/
Supervisory Patent Examiner, Art Unit 1792

Jason P Riggleman
Examiner
Art Unit 1792

JPR